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MassDEP RTN 3-23246

Class B-1 Response Action Outcome Partial Statement for 66–66A Franklin Street, Somerville, Massachusetts

50 Tufts Street Site, Somerville, Massachusetts

Submitted to:
UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

Submitted by:
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
781-721-4000

REF
354.
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GEI

October 29, 2013

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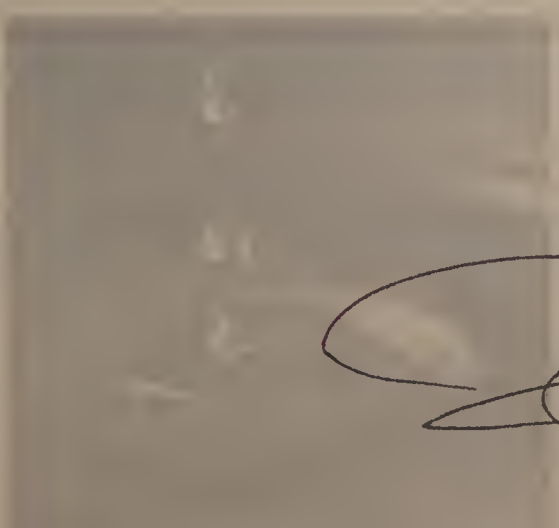

Ileen S. Gladstone, P.E., LSP, LEED AP
Vice President

REF
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GEI

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A. MassDEP Transmittal Form (BWSC-104) "Response Action Outcome (RAO) Statement"
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Executive Summary

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. (GEI) prepared this Class B-1 Response Action Outcome Partial (RAO-P) Statement for 66-66A Franklin Street, Somerville, Massachusetts (the Property), which is a portion of the 50 Tufts Street site (the Site; Fig. 1). The Site is identified by Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-23246. A Site Map that shows the Property in relation to the Site boundary is presented in Fig. 2. This document provides closure for a portion of the Site under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000) and indicates that a condition of No Significant Risk (NSR) exists at the Property.

A release of chlorinated volatile organic compounds (VOCs) to soil and groundwater at the Site was first reported to MassDEP in 2002. Subsequent investigations at the Site identified chlorinated VOCs, particularly tetrachloroethylene (also called perchloroethylene [PCE]), in indoor air at 50 Tufts Street, and in groundwater and indoor air at residential and commercial properties in the vicinity of 50 Tufts Street.

There is no groundwater monitoring well located at the Property. However, based on the concentration of chlorinated VOCs in groundwater in two monitoring wells located approximately 170 feet (ft) northwest and 210 ft south from the Property, the concentration of PCE in shallow groundwater at the Property is expected to be less than or only slightly above the laboratory reporting limit of 1 microgram per liter (µg/l). The Property is located within the Site solely due to its location near low concentrations of groundwater contamination in the deep overburden and bedrock.

Based on the following lines of evidence, GEI concludes that the vapor intrusion pathway is incomplete at the Property:

- Residual or connected phase dense non-aqueous phase liquid has not been detected at or near the Property.
- Chlorinated VOCs were not measured above the laboratory reporting limit in the shallow groundwater samples collected near the Property in MW121S. Except for a single detection of PCE (1.5 µg/l) during the 14 sampling rounds since 2007, chlorinated VOCs were not measured above the laboratory reporting limit in the shallow groundwater samples collected near the Property in MW119S.

- The single detection of PCE in MW119S is less than the MCP Method 1 GW-2 standard (50 µg/l); therefore, chlorinated VOCs have not been detected above the MCP GW-2 standards.
- Chlorinated VOCs have not been detected above laboratory reporting limits in soil samples collected from MW119, MW121, and SB121, which are near the Property.
- Except for a single detection of PCE (1.5 µg/l) detected in MW119S, chlorinated VOCs were not detected above laboratory reporting limits in shallow groundwater near the Property; therefore, soil vapor samples were not collected at the Property.
- Individual chlorinated VOCs detected in the soil vapor samples collected from MW119S and MW121S were below residential screening criteria presented in MassDEP Guidance "WSC No. 11-435: Interim Final Vapor Intrusion Guidance," dated December 2011 and revised March 7, 2013 (2011 VI Guidance, revised 2013). The soil vapor samples were not collected from beneath the slab of the Property building. However, because the soil vapor sampling locations are approximately 170 ft and 210 ft from the Property, respectively, they are an indicator of low soil vapor concentrations in this portion of the Site.
- Chlorinated VOCs have not been detected above laboratory reporting limits in indoor air samples collected from nearby buildings.

A Class B-1 RAO-P Statement is appropriate for the Property based on the following:

- Remedial actions were not conducted and a Permanent Solution has been achieved.
- A condition of NSR to human health, safety, public welfare, and the environment exists for all receptors.
- An Activity and Use Limitation is not required to maintain a condition of NSR.

1. Introduction

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. (GEI) of Woburn, Massachusetts prepared this Class B-1 Response Action Outcome Partial (RAO-P) Statement for 66-66A Franklin Street, Somerville, Massachusetts (the Property), which is a portion of the 50 Tufts Street site (the Site; Fig. 1). The Site includes 50 Tufts Street, surrounding residential and commercial properties to the east and immediately west of 50 Tufts Street, and the Michael E. Capuano Early Childhood Center (Capuano Center). A Site Map that shows the Property in relation to the Site boundary is presented in Fig. 2. Chlorinated volatile organic compounds (VOCs), particularly tetrachloroethylene (also called perchloroethylene [PCE]), have been detected in soil, groundwater (shallow and deep overburden, and bedrock), soil vapor, and indoor air at portions of the Site.

This document provides closure for the Property, which is a portion of the Site under the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000), and indicates that a condition of No Significant Risk (NSR) exists at the Property.

The Site is identified by Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-23246. The "Immediate Response Action Plan" associated with RTN 3-23246 was submitted to MassDEP on January 9, 2006. The Site is currently classified Tier IC (Permit No. W085813). The "Phase II Comprehensive Site Assessment, Method 3 Risk Characterization, and Phase III Remedial Action Plan," (Phase II/III) for the Site was submitted to MassDEP on July 14, 2008. The "Phase IV Remedy Implementation Plan," (Phase IV) was submitted to MassDEP on August 10, 2009. The "Immediate Response Action Completion Report and Remedial Monitoring Report No. 11," (IRAC Report) was submitted to MassDEP on November 13, 2009, and the "Immediate Response Action Completion Report Addendum," was submitted to MassDEP on April 1, 2011. The "Phase IV Final Inspection Report, Remedial Monitoring Report No. 15, and Phase V Remedy Operation Status Report," was submitted to MassDEP on August 4, 2011.

1.1 Purpose

The purpose of this Class B-1 RAO-P Statement, in accordance with the requirements of the MCP, is to document that a Permanent Solution has been achieved for the Property.

1.2 Scope

The scope of this Class B-1 RAO-P Statement for the Property is to:

- Provide a summary of the environmental conditions.
- Evaluate the risk to human health, safety, public welfare, and the environment at the Property.
- Demonstrate that the applicable requirements for a Class B-1 RAO-P have been achieved.

1.3 Submittals

The original MassDEP transmittal form (BWSC-104) was submitted online via eDEP and a copy is included in Appendix A. As required by the MCP (310 CMR 40.1403[3][f]), GEI submitted letters to the Somerville Chief Municipal Officer and the Board of Health notifying them of the availability of this Class B-1 RAO-P Statement. Copies of the notification letters are in Appendix B.

1.4 Public Record

Documents related to the environmental investigations conducted at the Site are on file with the MassDEP Northeast Regional Office located at 205B Lowell Street in Wilmington, Massachusetts. Additionally, local public document repositories have been established at the Somerville Central Public Library and at the City of Somerville Clerk's Office. GEI also provides electronic versions of the repository documents to the City for posting to its web site.

1.5 Contact Information

Entity Undertaking Response Actions
Timothy Cosgrave
Manager, Environmental Health & Safety
UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887
978-658-8888 ext. 4332

Licensed Site Professional (LSP)
Ileen S. Gladstone, P.E., LSP, LEED AP
Vice President
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801
781-721-4012
LSP License: 9719

1.6 Conceptual Site Model

GEI developed this Conceptual Site Model (CSM) to describe release mechanisms, contaminant distribution, and potential exposure pathways associated with the Property. The CSM is based upon the investigation data documented in the Phase II/III and IRAC Report. Site features associated with the CSM are shown in Fig. 2.

1.6.1 Property Location and Description

The Property is located within the Site boundary associated with a release of chlorinated VOCs to soil and groundwater at 50 Tufts Street, located approximately 950 feet (ft) west of the Property. The Property is located in a commercial/residential zoning district, fronts Franklin Street to the west, is bounded by residential property to the north and east, and vacant property to the south. The Property is occupied by a multi-family residential building.

1.6.2 Contaminant Distribution

From approximately 1955 to approximately 2002, 50 Tufts Street was used for storage and distribution of industrial chemicals, laundry supplies, and dry cleaning supplies. Chemicals stored at and delivered to and from 50 Tufts Street included chlorinated solvents. These chlorinated VOCs – particularly PCE, trichloroethylene (TCE), and 1,1,1-trichloroethane (TCA) – have been detected in soil, soil vapor, indoor air, and groundwater at 50 Tufts Street. A release of chlorinated VOCs to soil and groundwater at the Site was first reported to MassDEP in 2002.

Chlorinated VOCs generally have not been detected in soils beyond the boundaries of 50 Tufts Street. Chlorinated VOCs have been detected at the Site in the shallow and deep overburden and bedrock groundwater. There is no groundwater monitoring well located at the Property. However, based on the concentration of chlorinated VOCs in shallow groundwater in two monitoring wells located approximately 170 ft northwest and 210 ft south from the Property (MW119S and MW121S, respectively), the concentration of PCE in shallow groundwater at the Property is expected to be less than or only slightly above the laboratory reporting limit of 1 microgram per liter (µg/l).

The eastern boundary of the Site is based on the lateral extent of the deep overburden and bedrock groundwater plumes, where low concentrations of PCE have been detected in groundwater collected from wells in till and bedrock (Fig. 2). The Property is located within the Site solely due to its location near low concentrations of groundwater contamination in the deep overburden and bedrock.

2. Property Investigations

Since March 2006, GEI has conducted subsurface investigations that included collecting soil, groundwater, soil vapor, and indoor air samples across the Site for laboratory testing. The investigations that are representative of conditions at the Property are summarized below. The laboratory reports associated with the majority of these investigations have been submitted to MassDEP under previous submittals, and are not re-presented in this report.

2.1 Groundwater Sampling

There is no groundwater monitoring well located at the Property. However, the concentrations of chlorinated VOCs detected in groundwater samples collected from monitoring wells located approximately 170 ft northwest of the Property (MW119S and MW119T), and approximately 210 ft south of the Property on Franklin Avenue (MW121S and MW121D), are considered to be representative of groundwater conditions at the Property.

Fourteen groundwater samples have been collected from both MW119S and MW119T between August 2007 and April 2013. Thirteen groundwater samples have been collected from MW121S, and 19 groundwater samples have been collected from MW121D (including 5 duplicate samples collected during 14 individual sampling events), between October 2007 and April 2013. The groundwater samples were submitted to Accutest Laboratories (Accutest) of Marlborough, Massachusetts for analysis of VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B. The laboratory testing results for groundwater samples collected from MW119S, MW119T, MW121S, and MW121D are summarized in Table 1.

Monitoring well MW119S is a shallow well screened between 5 and 20 ft below ground surface (bgs). The following compounds were detected above laboratory reporting limits in groundwater samples collected from monitoring well MW119S: Acetone, methyl tert-butyl ether (MBTE), and PCE. Acetone and MTBE are not related to the Site. PCE was detected only once (1.5 µg/l) during the 14 sampling rounds since 2007.

Monitoring well MW121S is a shallow well screened between 5 and 20 ft bgs. Chlorinated VOCs were not detected above laboratory reporting limits in groundwater samples collected from monitoring well MW121S. Acetone, carbon disulfide, and naphthalene were detected at low concentrations, but are not related to the Site.

Monitoring well MW119T is a deep well screened between 42 and 47 ft bgs within glacial till. The following compounds were detected above laboratory reporting limits in at least one groundwater sample collected from MW119T: Chloromethane, 1,1-dichloroethane (DCA), 1,1-dichloroethylene (DCE), cis-1,2-DCE, MTBE, PCE, TCA, and TCE. Chloromethane and MTBE are not related to the Site.

Monitoring well MW121D is a bedrock well screened between 32 and 47 ft bgs. The following compounds were detected above laboratory reporting limits in at least one groundwater sample collected from MW121D: Bromodichloromethane, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, MTBE, PCE, toluene, TCA, TCE, and vinyl chloride. Bromodichloromethane, MTBE, and toluene are not related to the Site.

2.2 Soil Sampling

Prior to the installation of monitoring wells MW121S and MW121D, a shallow soil sample (SB121A) was collected from 0 to 3 ft bgs during the attempted installation of a groundwater monitoring well located approximately 100 ft southeast of the Property (Fig. 2). Due to subsurface conditions, the well installation was not completed. GEI submitted this sample to Accutest for VOC analysis by EPA Method 8260B. Chlorinated VOCs were not detected above laboratory reporting limits in this sample.

Soil samples B119-S4 (6 to 8 ft), B119-S7 (14 to 16 ft), MW121D-VAC 1 (1 to 3 ft), MW121D-VAC 2 (3 to 5 ft), and MW121D-S3 (10 to 12 ft) were collected during the installation of groundwater monitoring wells MW119S, MW119T, and MW121D and submitted to Accutest for VOC analysis by EPA Method 8260B. Chlorinated VOCs were not detected above laboratory reporting limits in these soil samples. The laboratory testing results for these soil samples are summarized in Table 2.

2.3 Soil Vapor Sampling

Except for a single detection of PCE (1.5 µg/l) in MW119S, chlorinated VOCs were not detected above laboratory reporting limits in shallow groundwater near the Property; therefore, soil vapor samples were not collected at the Property. Soil vapor monitoring ports were installed in MW119S and MW121S, and soil vapor samples were collected on August 28 and October 16, 2007 from MW119S, and on October 22, 2007 and January 8, 2008 from MW121S. GEI submitted the samples to Accutest for VOC analysis by EPA Method TO-15 for the following analytes:

- Carbon tetrachloride
- Chloroethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethylene
- cis-1,2-Dichloroethylene
- trans-1,2-Dichloroethylene
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene (PCE)
- 1,1,1-Trichloroethane (TCA)
- 1,1,2-Trichloroethane
- Trichloroethylene (TCE)
- Vinyl Chloride

The VOCs chloroethane, 1,2-DCA, PCE, TCE, and vinyl chloride each were detected in at least one soil vapor sample from MW119S, and 1,1-DCA, PCE, and vinyl chloride each were detected at concentrations slightly above laboratory reporting limits in at least one soil vapor sample from MW121S. 1,2-DCA is not related to the Site. The laboratory testing results are summarized in Table 3.

Soil vapor samples were not collected from beneath the slab of the Property building. However, because the soil vapor sampling locations are approximately 170 ft northwest and 210 ft south from the Property, they are an indicator of low soil vapor concentrations in this portion of the Site. Individual chlorinated VOCs detected in the soil vapor were below residential soil vapor screening criteria presented in MassDEP Guidance "WSC No. 11-435: Interim Final Vapor Intrusion Guidance," dated December 2011 and revised March 7, 2013 (2011 VI Guidance, revised 2013).

3. Evaluation of Vapor Intrusion Pathway

All pertinent data were reviewed and considered to evaluate the potential for a complete vapor intrusion pathway on the Property. Based on the following lines of evidence, there is no such complete vapor intrusion pathway:

- Residual or connected phase dense non-aqueous phase liquid has not been detected at or near the Property.
- Chlorinated VOCs were not measured above the laboratory reporting limit in the shallow groundwater samples collected near the Property in MW121S. Except for a single detection of PCE (1.5 µg/l) during the 14 sampling rounds since 2007, chlorinated VOCs were not measured above the laboratory reporting limit in the shallow groundwater samples collected near the Property in MW119S.
- The single detection of PCE in MW119S is less than the MCP Method 1 GW-2 standard (50 µg/l); therefore, chlorinated VOCs have not been detected above the MCP GW-2 standards.
- Chlorinated VOCs have not been detected above laboratory reporting limits in soil samples collected from MW119, MW121, and SB121, which are near the Property.
- Except for a single detection of PCE (1.5 µg/l) detected in MW119S, chlorinated VOCs were not detected above laboratory reporting limits in shallow groundwater near the Property; therefore, soil vapor samples were not collected at the Property.
- Individual chlorinated VOCs detected in the soil vapor samples collected from MW119S and MW121S were below residential screening criteria presented in the 2011 VI Guidance (revised 2013). The soil gas samples were not collected from beneath the slab of the Property building; however, because the soil vapor sampling locations are approximately 170 ft and 210 ft from the Property, respectively, they are an indicator of low soil vapor concentrations in this portion of the Site.
- Chlorinated VOCs have not been detected above laboratory reporting limits in indoor air samples collected from nearby buildings.

4. Method 1 Risk Characterization

Four Site-wide Method 3 Risk Characterization Reports were previously prepared for the Site. The July 2008 Phase II/Phase III included a Method 3 Risk Characterization for the Site, prepared by AMEC Earth & Environmental (AMEC) of Westford, Massachusetts. In response to MassDEP comments, AMEC prepared a Supplemental Method 3 Risk Characterization (Supplemental Risk Characterization) in May 2009. The Supplemental Risk Characterization evaluated potential risks using the framework in the July 2008 Method 3 Risk Characterization, including an indoor air Exposure Assessment for each affected residence without an effective Exposure Pathway Elimination Measure (EPEM). A Revised Supplemental Risk Characterization was prepared to support the IRAC Report. Potential risks presented in the Supplemental Risk Characterization were updated in the Revised Supplemental Risk Characterization to reflect additional data collection and additional EPEMs installed by GEI. An Updated Revised Supplemental Risk Characterization was prepared by ARCADIS U.S., Inc. of Chelmsford, Massachusetts in April 2011 to respond to a MassDEP Notice of Audit Findings and Notice of Noncompliance for the IRAC Report.

Based on all lines of evidence, there is not a complete vapor intrusion pathway at the Property. Accordingly, a Method 1 Risk Characterization was completed for the Property (66-66A Franklin Street Risk Characterization) in accordance with 310 CMR 40.0900 to support this RAO-P. A Method 1 Risk Characterization evaluates foreseeable Site uses, potential receptors, compounds of potential concern (COPCs), and exposure point concentrations (EPCs), and compares EPCs detected in soil and groundwater to MassDEP-derived standards. If the EPCs in soil and groundwater are less than the applicable Method 1 standards then a condition of NSR of harm to human health, public welfare, and the environment exists. In accordance with 310 CMR 40.0971(5), a separate characterization of the risk of harm to safety was also conducted.

A Method 1 Risk Characterization was appropriate for the Property because; 1) COPCs have not been detected at or near the Property in media other than groundwater; 2) MCP standards exist for the COPCs detected at or near the Property; and 3) compounds considered by MassDEP to bioaccumulate are not present within 2 ft of the ground surface.

4.1 Current and Reasonably Foreseeable Site Activity and Use

Consistent with the requirements of the MCP (310 CMR 40.0923), the 66-66A Franklin Street Risk Characterization considered both current and future uses of the Property. The

current use of the Property is as a residence, and the reasonably conservative foreseeable use of the Property is residential.

4.2 Potential Human Receptors

Potential human receptors were identified based on current and foreseeable uses of the Property. Current use receptors at the Property are residents. Future use receptors of the Property are future residents and construction workers during potential future excavation/development activities.

4.3 Potential Environmental Receptors

The Property is in an urban area, is fully developed, and would not likely represent a potentially significant terrestrial habitat. Based on the scarcity of open land, the Property does not provide for exposures for potential terrestrial receptors.

The closest surface water bodies are the Mystic River, located approximately 1 mile northeast of the Property, and the Charles River, located approximately 1.7 miles south-southeast of the Property. Based on the distance to the nearest aquatic receptors and the current levels of COPCs in groundwater, the transport of COPCs in groundwater to surface water and sediment is not considered to be a significant exposure pathway.

4.4 Summary of Analytical Results

The environmental conditions at the Property have been characterized based on data collected in the immediate vicinity of the Property, as described in Section 2.

4.4.1 Soil

Chlorinated VOCs generally have not been detected in soils beyond the boundaries of the 50 Tufts Street property; therefore, soil samples were not collected at the Property. Chlorinated VOCs were not detected above laboratory reporting limits in the soil samples collected during the installation of MW119S and MW119T, located approximately 170 ft northwest of the Property, nor during the installation of MW121D, located approximately 210 ft south of the Property. In addition, chlorinated VOCs were not detected above laboratory reporting limits in the soil sample SB121A, collected during the attempted installation of a well located approximately 100 ft southeast of the Property (Table 2). Consequently, soil at the Property is not considered to be impacted by Site COPCs, and is not evaluated further in this risk characterization.

4.4.2 Groundwater

We reviewed and evaluated groundwater data for use in the Method 1 Risk Characterization to identify potential exposure points and derive EPCs based on the relevant groundwater categories identified for the Property. Groundwater data included in the Method 1 Risk Characterization are from the monitoring wells located approximately 170 ft northwest of the Property (MW119S and MW119T), and approximately 210 ft south of the Property (MW121S and MW121D), and are presented in Table 1.

4.4.3 Hot Spot Evaluation

Under the MCP (310 CMR 40.0924), hot spots must be considered as distinct exposure points. A hot spot is defined as a discrete area where the concentrations of oil or hazardous material (OHM) are substantially higher than those concentrations in the surrounding area. No "hot spots" have been identified at the Property.

4.5 COPCs

The following compounds were detected above reporting limits in at least one groundwater sample collected from groundwater monitoring wells MW119S, MW119T, MW121S, and MW121D: Acetone, bromodichloromethane, carbon disulfide, chloromethane, 1,1- DCA, 1,1-DCE, cis-1,2-DCE, MTBE, naphthalene, PCE, trans-1,2-DCE, toluene, TCA, TCE, and vinyl chloride.

The COPCs at the Site have been limited to certain chlorinated solvents, together with their associated breakdown products. Carbon disulfide and chloromethane are not chlorinated solvents or a breakdown product of chlorinated solvents. Acetone, bromodichloromethane, MTBE, naphthalene, and toluene have historically been detected at higher concentrations in monitoring wells located several hundred feet away from the 50 Tufts Street property (MW106, MW107, MW121S, and MW121D) than the maximum concentration detected in samples collected from the 50 Tufts Street property. These compounds are not considered to be associated with the releases of OHM at 50 Tufts Street; therefore, they are not COPCs at the Site and are not evaluated further in this risk characterization for the Property.

COPCs were not detected in samples collected from shallow groundwater monitoring well MW121S. The COPCs 1,1- DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCA, TCE, and vinyl chloride were detected in at least one sample collected from MW119S, MW119T, and MW121D.

4.6 Soil and Groundwater Categories

This section identifies and documents the applicable soil and groundwater categories, as described in the MCP (310 CMR 40.0930). The soil and groundwater categories are considered general indicators of the potential for exposure to OHM.

4.6.1 Soil Categories

Under the MCP, soil can be classified into one of three categories (S-1, S-2, or S-3). Category S-1 soil represents the highest potential exposure because it assumes unrestricted use of the soil (i.e., residential), whereas category S-3 soil represents the lowest potential for exposure. Residents currently present at the Property are considered to have high frequency and high intensity contact with soil located outside of the building footprint. Soil beneath the building is considered to be isolated. Therefore, soil located from 0 to 15 ft bgs outside the building footprint is categorized as S-1, and soil located beyond 15 ft deep or beneath the building footprint is categorized as S-3.

For purposes of this risk characterization, all soil from 0 to 15 ft bgs at the Property is characterized as S-1. However, soil at the Property is not considered to be impacted by Site COPCs, and was not evaluated further in this risk characterization.

4.6.2 Groundwater Categories

The MCP identifies three groundwater categories which correspond to the following three distinct types of exposures:

- **Groundwater Category GW-1** applies to groundwater assumed to be a current or future source of drinking water.
- **Groundwater Category GW-2** applies to groundwater considered to be a potential source of vapors that could migrate through the soil and concentrate in indoor air of existing, occupied buildings. GW-2 is defined as groundwater located within 30 ft of an existing or planned building or structure that is or will be occupied, and the average annual depth to groundwater in that area is 15 ft or less.
- **Groundwater Category GW-3** applies to groundwater that is assumed to discharge to surface water. All groundwater in the Commonwealth is classified as GW-3.

Because the exposures are not necessarily related to each other, they are not mutually exclusive. Therefore, more than one category may be applicable to a site and/or different areas of a site.

Groundwater beneath the Property is not located within a current or potential drinking water source area. There is an occupied building at the Property, and the depth to groundwater is unknown; however, the depth to groundwater in MW119S (located approximately 170 ft northwest of the Property) ranges between 4 to 5 ft bgs, and the depth to groundwater in MW121S (located approximately 210 ft south of the Property) ranges between 7 to 9 ft bgs. Therefore, we have considered depth to groundwater at the Property to be less than 15 ft bgs. Based on this information, the applicable groundwater categories for the Property are GW-2 and GW-3.

4.7 Identification of EPCs

The MCP requires that the estimation of EPCs be representative of actual and foreseeable exposures.

4.7.1 Groundwater EPCs

For a Method 1 Risk Characterization, and in accordance with 310 CMR 40.0924, "the groundwater EPC shall be the groundwater resource itself, as measured at each wellhead…" Therefore, the maximum groundwater concentrations for each COPC in monitoring wells MW119S, MW119T, MW121S, and MW121D were identified as EPCs (Table 4). The location of groundwater monitoring wells MW119S, MW119T, MW121S, and MW121D are shown in Fig. 2.

4.8 Comparison of EPCs to MCP Standards

A condition of NSR of harm to health, public welfare, and the environment exists if the EPCs are less than the lowest applicable MCP soil or groundwater standard.

For groundwater, the EPCs were identified and compared to applicable Method 1 GW-2 and GW-3 groundwater standards (Table 4). Based on the depth from which the groundwater samples were collected from each monitoring well (5 to 20 ft bgs at MW119S and MW121S, 32 to 47 ft bgs at MW121D, and 42 to 47 ft bgs at MW119T), the applicable Method 1 standards for comparison to MW119S and MW121S are the GW-2 and GW-3 standards, and the applicable Method 1 standards for comparison to MW119T and MW121D are the GW-3 standards. The results of this comparison show that the groundwater EPCs for all COPCs are below the applicable Method 1 standards. Therefore, a condition of NSR of harm to health, public welfare and the environment exists at the Property.

4.9 Characterization of Risk of Harm to Safety

In accordance with the MCP (310 CMR 40.0971[5]), a separate characterization of risk of harm to safety was also conducted in accordance with 310 CMR 40.0960. There are no rusted or corroded drums or containers, open pits, lagoons, or other dangerous structures at the Property; there is no threat of fire or explosion at the Property; and there are no uncontained materials which exhibit the characteristics of corrosivity, reactivity, or flammability at the Property. Therefore, a condition of NSR of harm to safety exists at the Property.

4.10 Conclusions

The Method 1 Risk Characterization for the Property concluded:

- A condition of NSR to health, safety, public welfare, and the environment exists for all receptors.
- No remedial actions are required.
- An Activity and Use Limitation (AUL) is not required to maintain a condition of NSR.

Therefore, no further action is required at the Property.

5. Representativeness Evaluation and Data Usability Assessment

The purpose of a Representativeness Evaluation and Data Usability Assessment (REDUA) is to evaluate the extent to which a data set meets specific site characterization and data usability objectives. The majority of the data on which this Class B-1 RAO-P Statement relies was evaluated under the REDUA presented in the Phase II/III, which was submitted in July 2008. However, additional groundwater samples have been collected since the Phase II/III, and the analytical results for some of those samples are included in the data set for this RAO-P Statement. A REDUA for these additional data is presented below. We performed the REDUA in general accordance with MassDEP Policy "WSC No. 07-350: MCP Representativeness Evaluations and Data Usability Assessments," dated September 19, 2007.

5.1 Conceptual Site Model

The CSM is presented in Section 1.6.

5.2 Field and Screening Data

Field data include physical parameter measurements we made during groundwater sampling (e.g., pH, temperature, conductivity, dissolved oxygen, etc.). We reviewed field and screening data with the associated laboratory testing reports as part of the data quality assessment.

5.3 Sampling Rationale, Distribution, and Data Completeness

Environmental samples were submitted for chlorinated VOC testing consistent with the Site history and types of chemicals stored and used at the Site. To characterize the groundwater at the Property, GEI relied on groundwater monitoring wells MW119S and MW119T, located approximately 170 ft northwest of the Property, and MW121S and MW121D, located approximately 210 ft south of the Property. Fourteen groundwater samples have been collected from both MW119S and MW119T, 13 groundwater samples have been collected from MW121S, and 19 groundwater samples have been collected from MW121D (including 5 duplicate samples collected during 14 individual sampling events), over an approximately 6-year period.

Except for a single detection of PCE (1.5 µg/l) in MW119S, chlorinated VOCs were not detected above laboratory reporting limits in shallow groundwater near the Property; therefore, soil vapor samples were not collected at the Property.

No data associated with conditions at the Property were rejected for quality assurance/quality control reasons. We did not identify data gaps related to sample distribution or data quality. Therefore, the data set is considered 100% complete. We did not identify inconsistent data. Field screening results, and observations such as visual and olfactory observations, were consistent with laboratory testing results. There is little uncertainty associated with the data used to support this Class B-1 RAO-P Statement given the number of samples collected and the locations at which they were collected. All data collected were considered representative.

5.4 Data Usability Assessment

Laboratory testing data used to support this Class B-1 RAO-P Statement were generated pursuant to the MassDEP Compendium of Analytical Methods (CAM) and 310 CMR 40.1056 and meet the criteria for "Presumptive Certainty" as identified in MassDEP Document "WSC No. 10-320: Compendium of Quality Control Requirements and Performance Standards for Selected Analytical Protocols," dated July 1, 2010. These data also are consistent with our field observations, are representative of conditions that exist or existed at the Property, and are of a level of precision and accuracy commensurate with the preparation of this Class B-1 RAO-P Statement.

5.5 Data Usability Criteria

We evaluated data for the Precision Accuracy Representativeness Completeness Comparability and Sensitivity (PARCCS) parameters as part of our field procedures, our laboratories' analytical protocols, and our in-house data review and validation process. The following groundwater data for MW121D (for COPCs) obtained since the Phase II/III were qualified as being estimated: the concentrations of 1,1-DCE, cis-1,2-DCE, PCE, and TCE in October 2008, the concentrations of TCA in January 2009, July 2009, and April 2010, and the concentrations of vinyl chloride in January 2009 and July 2009. The following groundwater data for MW119T (for COPCs) obtained since the Phase II/III were qualified as being estimated: the concentrations of 1,1-DCA and 1,1-DCE in October 2009, the concentrations of cis-1,2-DCE in January 2009, July 2009, October 2009, April 2012, and April 2013, and the concentrations of TCA in January 2009 and July 2009. These analytical results were considered sufficiently representative of groundwater conditions, and were included in the data set used to support this Class B-1 RAO-P Statement.

Laboratory reporting limits for COPCs considered in the risk characterization were of appropriate precision.

5.6 Statement of Suitability

In summary, the data set relied upon in this Class B-1 RAO-P Statement to characterize the conditions at the Property and perform a risk characterization is scientifically valid and defensible. It is of sufficient accuracy, precision, and completeness. In addition, the data set is representative of the spatial and temporal distribution of sampling points.

6. Class B-1 Response Action Outcome Partial Statement

Based on the results of the Phase II/III prepared for the Site, and the 66-66A Franklin Street Risk Characterization, it is the LSP's opinion that a Class B-1 RAO-P Statement is appropriate for the Property because:

- Remedial actions were not conducted and a Permanent Solution has been achieved.
- A condition of NSR to human health, safety, public welfare, and the environment exists for all receptors.
- An AUL is not required to maintain a condition of NSR.

This Class B-1 RAO-P Statement is a partial RAO because it only applies to the lateral limits of the Property shown on Fig. 2.

6.1 Operation, Maintenance, and/or Monitoring

There is no operation, maintenance, and/or monitoring required at the Property.

7. Limitations

The conclusions provided by GEI in this report are based solely on the information reported in this document. Additional information which was not available to GEI may result in a modification of the conclusions stated above. This report has been prepared in accordance with generally accepted hydrogeological practices. In the event that a MassDEP audit is conducted, it is the responsibility of UniFirst Corporation, and not GEI, to respond to the MassDEP Notice of Audit Findings. No warranty, expressed or implied, is made.

GEI Consultants

Geotechnical
Environmental
Water Resources
Ecological

Table 1
Chemical Testing Results - Groundwater
66-66A Franklin Street
Somerville, Massachusetts

		Sample Location:	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S
		Sample Name:	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S	MW119S
		Well Screen Interval (ft bgs):	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20
		Sample Date:	8/22/07	10/12/07	1/15/08	4/16/08	7/15/08	10/22/08	1/13/09	4/13/09	7/15/09	10/15/09	4/13/10	4/22/11	4/16/12	4/23/13
		Collected By:	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	**Method**	**Units**														
Volatile Organic Compounds (VOCs)	8260	µg/l														
Acetone[5]			< 5.0 J+	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.4 K-	< 10
Bromodichloromethane[5]			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide[5]			< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloromethane[5]			< 2.0 J+	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,3-Dichlorobenzene[5]			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethylene			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethylene			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl tert-butyl ether[5]			5.2 J+	2.0	2.1	0.83 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 K-	< 1.0 K-
Naphthalene[5]			< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.5	< 1.0	< 1.0
Toluene[5]			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene[5]			< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride			< 1.0 J+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting limit.
5. Analyte is not associated with the release of chlorinated VOCs at the Site, and is therefore not a compound of potential concern (COPC). Refer to Section 4.5 of this Response Action Outcome (RAO) report.
6. FD = Field Duplicate Sample.

Qualifying Notes:

G The result is estimated due to duplicate precision outside control limits.
J The reported result is below the laboratory reporting limit and is estimated.
J+ The reported result is estimated.
K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.

Table 1
Chemical Testing Results - Groundwater
66-66A Franklin Street
Somerville, Massachusetts

	Sample Location:		MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T
	Sample Name:		MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T	MW119T
	Well Screen Interval (ft bgs):		42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47	42 to 47
	Sample Date:		8/22/07	10/12/07	1/16/08	4/16/08	7/15/08	10/22/08	1/13/09	4/13/09	7/15/09	10/15/09	4/13/10	4/22/11	4/16/12	4/23/13
	Collected By:		GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	**Method**	**Units**														
Volatile Organic Compounds (VOCs)	8260	µg/l														
Acetone[5]			< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 K-	< 10
Bromodichloromethane[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloromethane[5]			9.2 J+	< 2.0	< 2.0	< 2.0 J+	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	1.4 J	< 2.0	< 2.0	< 2.0	< 2.0
1,3-Dichlorobenzene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			10.4 J+	11.0	10.9	10.4	11.0	5.3	9.0	9.1	7.7	10.8 J+	10.2	9.4	6.4	5.9
1,1-Dichloroethylene			2.0 J+	6.4	6.0	6.2	5.8	< 1.0	5.1	5.0	4.6	6.1 J+	5.4	7.0	4.4	4.2
cis-1,2-Dichloroethylene			0.54 J J+	1.2	1.1	1.2	1.1	< 1.0	0.20 J	1.0	0.66 J	0.94 J J+	< 1.0	< 1.0	0.95 J	0.80 J
trans-1,2-Dichloroethylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl tert-butyl ether[5]			4.1 J+	0.66 J	0.64 J	0.50 J	< 1.0	< 1.0	0.47 J	0.37 J	0.34 J	< 1.0	< 1.0	< 1.0	< 1.0	9.1 K-
Naphthalene[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			94.3 J+	105	85.0	86.3	81.2	17.5	78.8	72.2	85.8	72.5	85.4	74.6	75.1	68.5
Toluene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			< 1.0	0.69 J	0.52 J	2.6	< 1.0	< 1.0	0.46 J	< 1.0	0.54 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			25.9 J+	29.6	26.7	26.8	26.7	6.7	24.9	23.7	26.4	23.0	27.1	23.2	21.0	21.3
1,2,4-Trimethylbenzene[5]			< 5.0	< 5.0	< 5.0	0.56 J	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting limit.
5. Analyte is not associated with the release of chlorinated VOCs at the Site, and is therefore not a compound of potential concern (COPC). Refer to Section 4.5 of this Response Action Outcome (RAO) report.
6. FD = Field Duplicate Sample.

Qualifying Notes:

G The result is estimated due to duplicate precision outside control limits.
J The reported result is below the laboratory reporting limit and is estimated.
J+ The reported result is estimated.
K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.

Table 1
Chemical Testing Results - Groundwater
66-66A Franklin Street
Somerville, Massachusetts

		Sample Location:	MW121D									
		Sample Name:	MW121D	MW121D	MW121D	MW121D	MW901 (FD)	MW121D	MW900 (FD)	MW121D	MW901 (FD)	MW121D
		Well Screen Interval (ft bgs):	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1
		Sample Date:	10/22/07	1/15/08	4/17/08	7/14/08	7/14/08	10/22/08	10/22/08	1/12/09	1/12/09	4/13/09
		Collected By:	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	Method	Units										
Volatile Organic Compounds (VOCs)	8260	µg/l										
Acetone[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloromethane[5]			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0 J+	< 2.0 J+	< 2.0	< 2.0	< 2.0
1,3-Dichlorobenzene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.32 J	0.33 J	< 1.0
1,1-Dichloroethane			46.3	55.3	46.6	37.2	38.1	36.1	34.2	38.2	38.3	37.2
1,1-Dichloroethylene			13.2	< 1.0	16.7	12.8	12.6	12.9 G	8.4 G	14.0	14.2	14.1
cis-1,2-Dichloroethylene			3.9	11.8	6.4	21.8	22.6	83.7 G	41.2 G	134	138	80.0
trans-1,2-Dichloroethylene			< 1.0	0.70 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.1
Methyl tert-butyl ether[5]			3.0	3.8	2.4	2.1	2.0	5.6	5.6	1.8	1.8	1.7
Naphthalene[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			182	258	177	157	154	148 G	97.7 G	112	114	121
Toluene[5]			0.51 J	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			1.2	1.3	1.2	1.1	1.0	4.9	4.6	0.87 J	0.86 J	1.0
Trichloroethylene (TCE)			59.6	136	68.8	71.0	72.0	48.3 G	69.0 G	36.5	36.3	62.3
1,2,4-Trimethylbenzene[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride			0.39 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.32 J	0.31 J	< 1.0

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting limit.
5. Analyte is not associated with the release of chlorinated VOCs at the Site, and is therefore not a compound of potential concern (COPC). Refer to Section 4.5 of this Response Action Outcome (RAO) report.
6. FD = Field Duplicate Sample.

Qualifying Notes:

G The result is estimated due to duplicate precision outside control limits.
J The reported result is below the laboratory reporting limit and is estimated.
J+ The reported result is estimated.
K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.

Table 1
Chemical Testing Results - Groundwater
66-66A Franklin Street
Somerville, Massachusetts

			Sample Location:	MW121D (Continued)							
			Sample Name:	MW900 (FD)	MW121D	MW900 (FD)	MW121D	MW121D	MW121D	MW121D	MW121D
			Well Screen Interval (ft bgs):	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1	32.1 to 47.1
			Sample Date:	4/13/09	7/14/09	7/14/09	10/14/09	4/12/10	4/20/11	4/16/12	11/12/12	4/23/13
			Collected By:	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	**Method**	**Units**										
Volatile Organic Compounds (VOCs)	8260	µg/l										
Acetone[5]			< 5.0	< 5.0 F+	< 5.0	< 5.0	< 5.0 J+	< 5.0	< 5.0 K-	< 5.0 K-	< 10
Bromodichloromethane[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.3	< 1.0	< 1.0
Carbon disulfide[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloromethane[5]			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,3-Dichlorobenzene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			38.1	37.6	37.9	54.8	52.9	65.8	67.7	49.9	63.4
1,1-Dichloroethylene			14.2	11.0	10.4	21.8	18.0	24.1	25.5	17.6	22.3
cis-1,2-Dichloroethylene			78.4	105	106	253	279	217	178	122	193
trans-1,2-Dichloroethylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	5.8	< 1.0	< 1.0	2.9
Methyl tert-butyl ether[5]			1.9	1.4	1.4	< 1.0	0.94 J	2.0	1.7	2.1	8.6 K-
Naphthalene[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			118	140	139	115	119	219	356	223	276
Toluene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			< 1.0	0.95 J	1.0	< 1.0	0.62 J	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			70.7	76.3	76.5	146.0	96.3	233.0	342	207	342
1,2,4-Trimethylbenzene[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride			< 1.0	0.56 J	0.52 J	< 1.0	< 1.0	7.4	15.2	8.5	10.2

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting limit.
5. Analyte is not associated with the release of chlorinated VOCs at the Site, and is therefore not a compound of potential concern (COPC). Refer to Section 4.5 of this Response Action Outcome (RAO) report.
6. FD = Field Duplicate Sample.

Qualifying Notes:

G The result is estimated due to duplicate precision outside control limits.
J The reported result is below the laboratory reporting limit and is estimated.
J+ The reported result is estimated.
K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.

Table 1
Chemical Testing Results - Groundwater
66-66A Franklin Street
Somerville, Massachusetts

		Sample Location:	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S
		Sample Name:	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S	MW121S
		Well Screen Interval (ft bgs):	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20
		Sample Date:	10/22/07	1/15/08	4/17/08	7/14/08	10/22/08	1/12/09	4/13/09	7/14/09	10/14/09	4/12/10	4/20/11	4/16/12	4/23/13
		Collected By:	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Analyte	**Method**	**Units**													
Volatile Organic Compounds (VOCs)	8260	µg/l													
Acetone[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 F+	< 5.0	< 5.0 J+	< 5.0	8.2 K-	< 10
Bromodichloromethane[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	13.4
Chloromethane[5]			< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,3-Dichlorobenzene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.43 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethylene			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl tert-butyl ether[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 K-
Naphthalene[5]			< 5.0	5.2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethylene (PCE)			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene[5]			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane (TCA)			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (TCE)			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene[5]			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl chloride			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. ft bgs = feet below ground surface.
3. µg/l = micrograms per liter.
4. "<" = The analyte was not detected at a concentration above the specified reporting limit.
5. Analyte is not associated with the release of chlorinated VOCs at the Site, and is therefore not a compound of potential concern (COPC). Refer to Section 4.5 of this Response Action Outcome (RAO) report.
6. FD = Field Duplicate Sample.

Qualifying Notes:

G The result is estimated due to duplicate precision outside control limits.
J The reported result is below the laboratory reporting limit and is estimated.
J+ The reported result is estimated.
K- The result has a low bias due to blank spike or laboratory control sample recovery below lower control limits.

Table 2
Chemical Testing Results - Subsurface Soil
66-66A Franklin Street
Somerville, Massachusetts

	Location Name:		MW119T		SB121A	MW121D		
	Sample Name:		B119-S4	B119-S7	MW-121A-VAC1	MW121D-VAC1	MW121D-VAC2	MW121D-S3
	Sample Depth (ft):		6 to 8	14 to 16	0 to 3	1 to 3	3 to 5	10 to 12
	Sample Date:		8/7/07	8/7/07	10/5/07	10/8/07	10/8/07	10/9/07
Analyte	**Method**	**Units**						
Volatile Organic Compounds (VOCs)	8260	mg/kg						
Carbon tetrachloride			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
Chloroethane			< 0.21	< 0.29	< 0.24	< 0.27	< 0.32	< 0.33
Chloroform			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
1,1-Dichloroethane			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
1,1-Dichloroethylene			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
cis-1,2-Dichloroethylene			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
trans-1,2-Dichloroethylene			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
Tetrachloroethylene (PCE)			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
1,1,1-Trichloroethane (TCA)			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
Trichloroethylene (TCE)			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13
Vinyl chloride			< 0.086	< 0.12	< 0.097	< 0.11	< 0.13	< 0.13

General Notes:

1. Only analytical results for compounds of potential concern (COPCs) are presented. For a complete list of analytes refer to the laboratory data reports.
2. mg/kg = milligrams per kilogram.
3. ft = feet.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.

Table 3
Chemical Testing Results - Subsurface Soil Vapor
66-66A Franklin Street
Somerville, Massachusetts

	Location Name:		MW119S				MW121S			
	Sample Name:		SG-119S		MW119S-SG		MW121S-SG		MW121S-SG	
	Sample Date:		8/28/2007		10/16/2007		10/22/2007		1/8/2008	
	Units:		µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv	µg/m³	ppbv
Analyte	**Method**	**Screening Value (µg/m³)**								
Volatile Organic Compounds (VOCs)	TO-15									
Carbon tetrachloride		38	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.82 J	0.13 J
Chloroethane		NS	1.6	0.62	0.90	0.34	< 0.53	< 0.20	< 0.53	< 0.20
1,1-Dichloroethane		56	< 0.81	< 0.20	< 0.81	< 0.20	2.1	0.52	< 0.81	< 0.20
1,2-Dichloroethane[6]		6.3	0.85	0.21	1.4	0.35	< 0.81	< 0.20	< 0.81	< 0.20
1,1-Dichloroethylene		56	< 0.79	< 0.20	< 0.79	< 0.20	0.67 J	0.17 J	< 0.79	< 0.20
Tetrachloroethylene (PCE)		98	12	1.7	1.0 J	0.15 J	2.0	0.30	1.8	0.26
1,1,1-Trichloroethane (TCA)		210	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		28	1.2	0.23	0.64 J	0.12 J	< 1.1	< 0.20	< 1.1	< 0.20
Vinyl chloride		19	1.2	0.47	0.46 J	0.18 J	1.8	0.72	< 0.51	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes refer to the laboratory data reports.
2. µg/m³ = micrograms per cubic meter.
3. ppbv = parts per billion by volume.
4. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
5. Screening value presented in the Massachusetts Department of Environmental Protection's (MassDEP's) Guidance "WSC No. 11-435: Interim Final Vapor Intrusion Guidance," dated December 2011, revised March 2013.
6. Analyte is not associated with the release of chlorinated VOCs at the Site, and is therefore not a compound of potential concern (COPC). Refer to Section 4.5 of this Response Action Outcome (RAO) report.
7. NS = No known screening value listed.

Qualifying Notes:

J The reported result is below the laboratory reporting limit and is estimated.

Table 4
Exposure Point Concentrations - Groundwater
66-66A Franklin Street
Somerville, Massachusetts

			Sample Location:		MW119S	MW119T	MW121S	MW121D
			Method 1 Standards		Exposure Point Concentrations[3]	Exposure Point Concentrations[3]	Exposure Point Concentrations[3]	Exposure Point Concentrations[3]
Analyte	**Method**	**Units**	**GW-2**	**GW-3**				
Volatile Organic Compounds (VOCs)	8260B	µg/l						
Chloroform			50	20,000	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane			1,000	20,000	< 1.0	11.0	< 1.0	67.7
1,1-Dichloroethylene			80	30,000	< 1.0	7.0	< 1.0	25.5
cis-1,2-Dichloroethylene			100	50,000	< 1.0	1.2	< 1.0	279
trans-1,2-Dichloroethylene			90	50,000	< 1.0	< 1.0	< 1.0	5.8
Tetrachloroethylene (PCE)			50	30,000	1.5	105	< 1.0	356
1,1,1-Trichloroethane (TCA)			4,000	20,000	< 1.0	2.6	< 1.0	4.9
Trichloroethylene (TCE)			30	5,000	< 1.0	29.6	< 1.0	342
Vinyl chloride			2	50,000	< 1.0	< 1.0	< 1.0	15.2

General Notes:

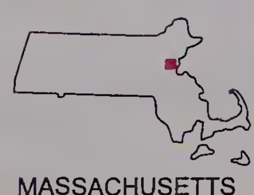
1. µg/l = micrograms per liter.
2. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
3. The exposure point concentrations are the maximum VOC concentration detected at each monitoring well.
4. Based on the depth from which the groundwater samples were collected from each monitoring well, the applicable Method 1 Standards for comparison to MW119S and MW121S are the GW-2 and GW-3 Standards, and the applicable Method 1 Standard for comparison to MW119T and MW121D is the GW-3 Standard.

GEI Consultants

Geotechnical
Environmental
Water Resources
Ecological

0 1000 2000 4000 6000

SCALE, FEET



MASSACHUSETTS
QUADRANGLE LOCATION

This Image provided by MassGIS is taken from
U.S.G.S. Topographic 7.5 X 15 Minute Series
Boston North, MA Quadrangle, 1985.
Datum is National Geodetic Vertical Datum (NGVD 1929).
Contour Interval is 3 Meters.

Class B-1 Response Action Outcome Partial Statement 50 Tufts Street Somerville, Massachusetts	GEI Consultants	SITE LOCATION MAP
UniFirst Corporation Wilmington, Massachusetts	Project 04516-3	October 2013 Fig. 1

N:\04516\#Drafting\04516-3\Partial RAOs\Wave 1\0451603-00- RAOP

LEGEND:

- MONITORING WELL WITH SOIL VAPOR SAMPLE PORT INSTALLED BY GEI, JANUARY 2007 - JANUARY 2008
- MONITORING WELL INSTALLED BY SANBORN HEAD ASSOCIATES, 2002
- MONITORING WELL INSTALLED BY GEOINSIGHT, JUNE 2004
- SOIL BORING ADVANCED BY GEOINSIGHT, AUGUST 2004
- MONITORING WELL INSTALLED BY GEI, MAY 2006
- DRIVEN POINT MONITORING WELL INSTALLED BY MADEP, MAY 2007
- MONITORING WELL INSTALLED PREVIOUSLY, DATE UNKNOWN
- PREVIOUSLY INSTALLED IRRIGATION WELL
- ▲ SOIL SAMPLE COLLECTED PRIOR TO MONITORING WELL INSTALLATION
- 84 STREET ADDRESS

MBTA = MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

- DISPOSAL SITE BOUNDARY (DASHED WHERE INFERRED)
- INFERRED EXTENT OF PCE CONCENTRATION IN SHALLOW GROUNDWATER GREATER THAN OR EQUAL TO 50 MICROGRAMS PER LITER (µg/l)
- PORTION OF SITE SUBJECT TO THE CLASS B-1 PARTIAL RAO

GENERAL NOTES:

1. HORIZONTAL CONTROL FOR THIS PLAN WAS ESTABLISHED BY GPS AND IS BASED ON THE NORTH AMERICAN DATUM OF 1983.
2. STREET AND PROPERTY LINES BASED ON SOMERVILLE ASSESSORS' MAPS AND ARE BEST FIT RELATIVE TO THE LOCATION OF THE 50 TUFTS ST. BUILDING.
3. MONITORING WELL LOCATIONS WERE ESTABLISHED BASED ON THE GROUND SURVEYS BY BSC GROUP, INC.
4. GEI OBSERVED ABANDONMENT OF SH-MW1 AND SH-1 THROUGH SH-5 IN 2007.

Class B-1 Response Action Outcome Partial Statement
50 Tufts Street
Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts

GEI Consultants

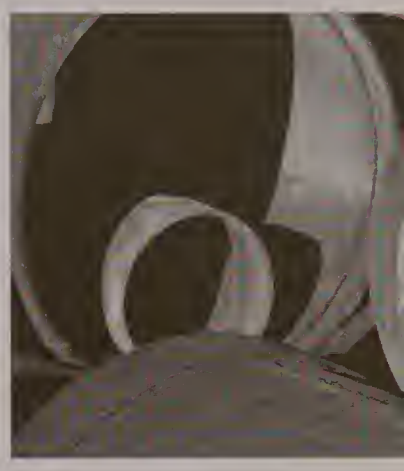
66-66A FRANKLIN STREET - PORTION OF DISPOSAL SITE SUBJECT TO CLASS B-1 RAO

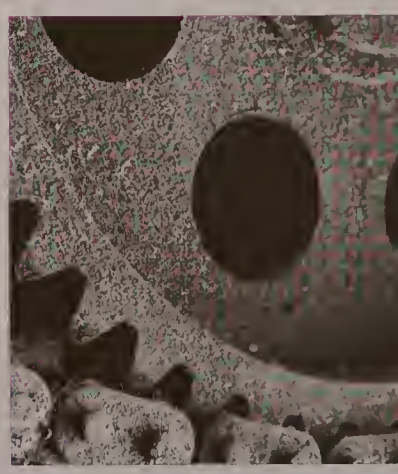
Project 04516-3 | October 2013 | Fig. 2

N:\04516\#Drafting\04516-3\Partial RAOs\Wave 1\0451603-26 66-66a Franklin St

GEI Consultants

Geotechnical
Environmental
Water Resources
Ecological





Appendix A

MassDEP Transmittal Form (BWSC-104) "Response Action Outcome (RAO) Statement"

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC104

RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number: 3 - 23246

For sites with multiple RTNs, enter the Primary RTN above.

A. SITE LOCATION:

1. Site Name/Location Aid: 50 TUFTS ST & PROP ACROSS THE ST

2. Street Address: 50 TUFTS ST

3. City/Town: SOMERVILLE 4. ZIP Code: 021454129

☑ 5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.

☐ a. Tier IA ☐ b. Tier IB ☑ c. Tier IC ☐ d. Tier II

6. If a Tier I Permit has been issued, provide Permit Number: W085813

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of RAO Statement (if previously submitted): _____ mm/dd/yyyy

☐ 2. Submit a **Response Action Outcome (RAO) Statement**

☐ a. Check here if this RAO Statement covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Tier Classified Primary RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. ☐ - _____ ☐ - _____

☐ 3. Submit a **Revised Response Action Outcome Statement**

☐ a. Check here if this Revised RAO Statement covers additional Release Tracking Numbers (RTNs), not listed on the RAO Statement or previously submitted Revised RAO Statements. RTNs that have been previously linked to a Tier Classified Primary RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. ☐ - _____ ☐ - _____

☑ 4. Submit a **Response Action Outcome Partial (RAO-P) Statement**

Check above box, if any Response Actions remain to be taken to address conditions associated with this disposal site having the Primary RTN listed in the header section of this transmittal form. This RAO Statement will record only an RAO-Partial Statement for that RTN. A final RAO Statement will need to be submitted that references all RAO-Partial Statements and, if applicable, covers any remaining conditions not covered by the RAO-Partial Statements.

Also, specify if you are an Eligible Person or Tenant pursuant to M.G.L. c. 21E s.2, and have no further obligation to conduct response actions on the remaining portion(s) of the disposal site:

☐ a. Eligible Person ☐ b. Eligible Tenant

☐ 5. Submit an optional **Phase I Completion Statement** supporting an RAO Statement

☐ 6. Submit a **Periodic Review Opinion evaluating the status of a Temporary Solution** for a Class C-1 RAO Statement, as specified in 310 CMR 40.1051 (Section F is optional)

☐ 7. Submit a **Retraction** of a previously submitted **Response Action Outcome Statement** (Sections E & F are not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply; for volumes, list cumulative amounts)

- [x] 1. Assessment and/or Monitoring Only
- [ ] 2. Temporary Covers or Caps
- [ ] 3. Deployment of Absorbent or Containment Materials
- [ ] 4. Treatment of Water Supplies
- [ ] 5. Structure Venting System
- [ ] 6. Engineered Barrier
- [ ] 7. Product or NAPL Recovery
- [ ] 8. Fencing and Sign Posting
- [ ] 9. Groundwater Treatment Systems
- [ ] 10. Soil Vapor Extraction
- [ ] 11. Bioremediation
- [ ] 12. Air Sparging
- [ ] 13. Monitored Natural Attenuation
- [ ] 14. In-situ Chemical Oxidation
- [ ] 15. Removal of Contaminated Soils
  - [ ] a. Re-use, Recycling or Treatment
    - [ ] i. On Site — Estimated volume in cubic yards
    - [ ] ii. Off Site — Estimated volume in cubic yards

iia. Facility Name: _____ Town: _____ State: _____

iib. Facility Name: _____ Town: _____ State: _____

iii. Describe: _____

- [ ] b. Landfill
  - [ ] i. Cover — Estimated volume in cubic yards

Facility Name: _____ Town: _____ State: _____

  - [ ] ii. Disposal — Estimated volume in cubic yards

Facility Name: _____ Town: _____ State: _____

- [ ] 16. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town : _____ State: _____

- [ ] 17. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town: _____ State: _____

C. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply; for volumes, list cumulative amounts)

☐ 18. Other Response Actions:

Describe:

☐ 19. Use of Innovative Technologies:

Describe:

D. SITE USE:

1. Are the response actions that are the subject of this submittal associated with the *redevelopment, reuse* or the *major expansion of the current use* of property(ies) impacted by the presence of oil and/or hazardous materials?

☐ a. Yes ☑ b. No ☐ c. Don't know

2. Is the property a *vacant or under-utilized commercial or industrial* property ("a brownfield property")?

☐ a. Yes ☑ b. No ☐ c. Don't know

3. Will funds from a state or federal brownfield incentive program be used on one or more of the property(ies) within the disposal site?

☐ a. Yes ☑ b. No ☐ c. Don't know If Yes, identify program(s):

4. Has a Covenant Not to Sue been obtained or sought?

☐ a. Yes ☑ b. No ☐ c. Don't know

5. Check all applicable categories that apply to the person making this submittal: ☐ a. Redevelopment Agency or Authority

☐ b. Community Development Corporation ☐ c. Economic Development and Industrial Corporation

☐ d. Private Developer ☐ e. Fiduciary ☐ f. Secured Lender ☐ g. Municipality

☐ h. Potential Buyer (non-owner) ☑ i. Other, describe: OTHER PRPS

This data will be used by MassDEP for information purposes only, and does not represent or create any legal commitment, obligation or liability on the part of the party or person providing this data to MassDEP.

E. RESPONSE ACTION OUTCOME CLASS:

Specify the Class of Response Action Outcome that applies to the disposal site, or site of the Threat of Release.
Select **ONLY** one Class.

☐ **1. Class A-1 RAO**: Specify one of the following:

☐ a. Contamination has been reduced to background levels. ☐ b. A Threat of Release has been eliminated.

☐ **2. Class A-2 RAO:** You **MUST** provide justification that reducing contamination to or approaching background levels is infeasible.

☐ **3. Class A-3 RAO**: You **MUST** provide an implemented Activity and Use Limitation (AUL) and justification that reducing contamination to or approaching background levels is infeasible.

☐ **4. Class A-4 RAO**: You **MUST** provide an implemented AUL, justification that reducing contamination to or approaching background levels is infeasible, and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface or below an Engineered Barrier is infeasible. If the Permanent Solution relies upon an Engineered Barrier, you must provide or have previously provided a Phase III Remedial Action Plan that justifies the selection of the Engineered Barrier.

E. RESPONSE ACTION OUTCOME CLASS (cont.):

☑ **5. Class B-1 RAO: Specify one of the following:**

☐ a. Contamination is consistent with background levels ☑ b. Contamination is **NOT** consistent with background levels.

☐ **6. Class B-2 RAO**: You **MUST** provide an implemented AUL.

☐ **7. Class B-3 RAO**: You **MUST** provide an implemented AUL and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface is infeasible.

☐ **8. Class C-1 RAO**: You must submit a plan as specified at 310 CMR 40.0861(2)(h). Indicate type of ongoing response actions.

☐ a. Active Remedial System ☐ b. Active Remedial Monitoring Program ☐ c. None

☐ d. Other Specify:

☐ **9. Class C-2 RAO**: You must hold a valid Tier I Permit or Tier II Classification to continue response actions toward a Permanent Solution.

F. RESPONSE ACTION OUTCOME INFORMATION:

1. Specify the Risk Characterization Method(s) used to achieve the RAO described above:

☑ a. Method 1 ☐ b. Method 2 ☐ c. Method 3

☐ d. Method Not Applicable-Contamination reduced to or consistent with background, or Threat of Release abated

2. Specify all Soil Category(ies) applicable. More than one Soil Category may apply at a Site. Be sure to check off all **APPLICABLE** categories:

☐ a. S-1/GW-1 ☐ d. S-2/GW-1 ☐ g. S-3/GW-1

☑ b. S-1/GW-2 ☐ e. S-2/GW-2 ☑ h. S-3/GW-2

☑ c. S-1/GW-3 ☐ f. S-2/GW-3 ☑ i. S-3/GW-3

3. Specify all Groundwater Category(ies) impacted. A site may impact more than one Groundwater Category. Be sure to check off all **IMPACTED** categories:

☐ a. GW-1 ☑ b. GW-2 ☑ c. GW-3 ☐ d. No Groundwater Impacted

4. Specify remediation conducted:

☐ a. Check here if soil remediation was conducted.

☐ b. Check here if groundwater remediation was conducted.

5. Specify whether the analytical data used to support the Response Action Outcome was generated pursuant to the Department's Compendium of Analytical Methods (CAM) and 310 CMR 40.1056:

☑ a. CAM used to support all analytical data. ☐ b. CAM used to support some of the analytical data.

☐ c. CAM not used.

☑ 6. Check here to certify that the Class A, B or C Response Action Outcome includes a Data Usability Assessment and Data Representativeness Evaluation pursuant to 310 CMR 40.1056.

7. Estimate the number of acres this RAO Statement applies to: .11

G. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> *if Section B indicates that either an* ***RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion*** *is being provided,* the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9719

2. First Name: ILEEN S 3. Last Name: GLADSTONE

4. Telephone: (781) 721-4012 5. Ext.: 6. FAX:

7. Signature: ILEEN S GLADSTONE

8. Date: 10/30/2013
mm/dd/yyyy

9. LSP Stamp:

H. PERSON MAKING SUBMITTAL:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: UNIFIRST CORPORATION

3. Contact First Name: TIMOTHY 4. Last Name: COSGRAVE

5. Street: 68 JONSPIN RD 6. Title: SENIOR MGR EH&S

7. City/Town: WILMINGTON 8. State: MA 9. ZIP Code: 018871090

10. Telephone: (978) 658-8888 11. Ext.: 4332 12. FAX:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC104

RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number: 3 - 23246

I. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON MAKING SUBMITTAL:

- [x] 1. RP or PRP
- [ ] a. Owner
- [ ] b. Operator
- [ ] c. Generator
- [ ] d. Transporter
- [x] e. Other RP or PRP Specify: OTHER PRPS
- [ ] 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- [ ] 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- [ ] 4. Any Other Person Making Submittal Specify Relationship:

J. REQUIRED ATTACHMENT AND SUBMITTALS:

- [ ] 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- [ ] 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of an RAO Statement that relies on the public way/rail right-of-way exemption from the requirements of an AUL.
- [x] 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of a RAO Statement with instructions on how to obtain a full copy of the report.
- [x] 4. Check here to certify that documentation is attached specifying the location of the Site, or the location and boundaries of the Disposal Site subject to this RAO Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site.
- [x] 5. Check here to certify that, pursuant to 310 CMR 40.1406, notice was provided to the owner(s) of each property within the disposal site boundaries, or notice was not required because the disposal site boundaries are limited to property owned by the party conducting response actions. (check all that apply)
  - [x] a. Notice was provided prior to, or concurrent with the submittal of a Phase II Completion Statement to the Department.
  - [ ] b. Notice was provided prior to, or concurrent with the submittal of this RAO Statement to the Department.
  - [ ] c. Notice not required. d. Total number of property owners notified, if applicable: 112
- [ ] 6. Check here if required to submit one or more AULs. You must submit an AUL Transmittal Form (BWSC113) and a copy of each implemented AUL related to this RAO Statement. Specify the type of AUL(s) below: (required for Class A-3, A-4, B-2, B-3 RAO Statements)
  - [ ] a. Notice of Activity and Use Limitation b. Number of Notices submitted:
  - [ ] c. Grant of Environmental Restriction d. Number of Grants submitted:
- [ ] 7. If an RAO Compliance Fee is required for any of the RTNs listed on this transmittal form, check here to certify that an RAO Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.
- [ ] 8. Check here if any non-updatable information provided on this form is incorrect, e.g. Site Address/Location Aid. Send corrections to the DEP Regional Office.
- [x] 9. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC104

RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number
3 - 23246

K. CERTIFICATION OF PERSON MAKING SUBMITTAL:

1. I, **TIMOTHY COSGRAVE**, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **TIMOTHY COSGRAVE** (Signature)

3. Title: **SENIOR MGR EH&S**

4. For: **UNIFIRST CORPORATION** (Name of person or entity recorded in Section H)

5. Date: **10/29/2013** mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town:

9. State:

10. ZIP Code:

11. Telephone:

12. Ext.:

13. FAX:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Received by DEP on

10/30/2013 5:13:54 PM

Transaction Overview Trans# 595352 ID# 3-23246 BWSC104 Response Action Outcome Transmittal Form

Forms | Attach Files | Signature | Receipt

Summary & Receipt

Print Receipt Exit

Your submission is complete. Thank you for using eDEP's online reporting system. Select My eDEP to see a list of your transactions. Click Print Receipt to save a copy of this receipt for your records.

DEP Transaction ID: 595352
Date and Time Submitted: 10/30/2013 5:13:54 PM
Other Email :

Form Name: BWSC104 Response Action Outcome Transmittal Form

RTN: 3-23246
Location: 50 TUFTS ST & PROP ACROSS THE ST
Address: 50 TUFTS ST, SOMERVILLE, 021454129

Person Making Submittal
UNIFIRST CORPORATION
TIMOTHY COSGRAVE
68 JONSPIN RD
WILMINGTON, MA 018871090

LSP
LSP #: 9719
LSP Name: ILEEN S GLADSTONE

Person Making Certification
UNIFIRST CORPORATION
Timothy Cosgrave

,

Ancillary Document Uploaded/Mailed
BWSC-104 Ques.B4 - RAO-P Report - Uploaded (66-66A Franklin Class B-1 RAO-P.pdf)

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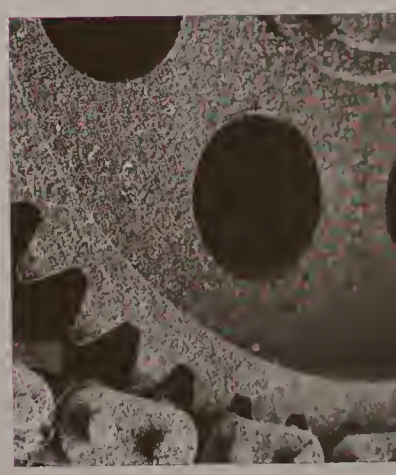
GEI Consultants

Geotechnical
Environmental
Water Resources
Ecological



Appendix B

Public Notification Documentation

GEI Consultants

Geotechnical
Environmental
Water Resources
Engineering

October 29, 2013
Project 04516-3

Mayor Joseph A. Curtatone
Somerville City Hall
93 Highland Avenue
Somerville, MA 02143-1740

Dear Mayor Curtatone:

Re: Class B-1 Response Action Outcome Partial Statement
66-66A Franklin Street
Somerville, Massachusetts
MassDEP RTN 3-23246

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. is notifying your office that a Class B-1 Response Action Outcome Partial (RAO-P) Statement has been prepared for the portion of the 50 Tufts Street disposal site identified as 66-66A Franklin Street in Somerville, Massachusetts.

The conclusions of the Class B-1 RAO-P Statement include the following:

- Remedial actions were not conducted and a Permanent Solution has been achieved.
- A condition of No Significant Risk (NSR) to human health, safety, public welfare, and the environment exists for all receptors.
- An Activity and Use Limitation (AUL) is not required to maintain a condition of NSR.

The RAO-P has been submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office in Wilmington, Massachusetts for the above-referenced Site. A copy of the report has been provided to Mr. Vithal Deshpande, Environmental Coordinator for the City of Somerville.

If you have any questions, please do not hesitate to contact me at 781-721-4012 or igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.

Ileen S. Gladstone, P.E., LSP, LEED AP
Vice President

JDR/ISG:csh
c: Tim Cosgrave, UniFirst Corporation
Vithal V. Deshpande, City of Somerville
MassDEP as part of Status Report

GEI Consultants

October 29, 2013
Project 04516-3

Geotechnical
Environmental
Water Resources
Engineering

Ms. Paulette Renault-Caragianes
Director, Health Department
City Hall Annex
50 Evergreen Avenue
Somerville, MA 02145-2819

Dear Ms. Renault-Caragianes:

Re: Class B-1 Response Action Outcome Partial Statement
66-66A Franklin Street
Somerville, Massachusetts
MassDEP RTN 3-23246

On behalf of UniFirst Corporation (UniFirst) of Wilmington, Massachusetts, GEI Consultants, Inc. is notifying your office that a Class B-1 Response Action Outcome Partial (RAO-P) Statement has been prepared for the portion of the 50 Tufts Street disposal site identified as 66-66A Franklin Street in Somerville, Massachusetts.

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If you have any questions, please do not hesitate to contact me at 781-721-4012 or igladstone@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC.

Ileen S. Gladstone, P.E., LSP, LEED AP
Vice President

JDR/ISG:csh
c: Tim Cosgrave, UniFirst Corporation
Vithal V. Deshpande, City of Somerville
MassDEP as part of Status Report

SOMERVILLE
PUBLIC LIBRARY

CLASS B-1 RESPONSE ACTION OUTCOME PARTIAL (RAO-P) STATEMENT

66-66A Franklin Ave, Somerville, MA
GEI Project No. 04516-3

748-CD
SOMR

Prepared by:

GEI Consultants

UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887

October 29, 2013

www.geiconsult

Geotechnical
Environmental
Water Resources
Ecological